

REMARKS

In view of the preceding amendments and the comments which follow, and pursuant to 37 C.F.R. § 1.111, amendment and reconsideration of the Official Action of December 29, 2003 is respectfully requested by Applicant.

Summary

Claims 1 – 10 stand rejected. Claims 6, 10 are amended. Claims 11 and 12 have been added. Claims 2, 3, 4, and 7 - 9 are cancelled. No new matter has been introduced as a result of these amendments.

Claims 1, 5, 6, and 10 – 12 are pending following entry of the present amendments.

Rejection under 35 U.S.C. § 102

The Examiner has rejected claim 1 – 10 under 35 U.S.C. § 102 (e) as being anticipated by Levin et al. (US Patent 6,154,210). The pending claim 1 is directed to a vehicle-mounted input unit provided with a manual manipulator, position sensors, actuators, and a control section for controlling the actuators. Claim 1 recites that "the control section computes the width of the movable range of the manual manipulator from its current position to an end of its possible motion according to changes in position signals supplied from the position sensors, and controls the output to the actuators according to the computed width of the movable range." Thus, the configuration of claim 1 enables the manual manipulator to give its operator a feel of resistance that varies with the width of the movable range of the manipulator. As such, the feel of resistance can be weakened when the movable range of the manual manipulator from its current position to an end of its possible motion is wide or, conversely, it can be emphasized when the movable range is narrow (page 8, lines 22 – 27). Whereas, Levin et al. disclose, in the patent section pointed out by the Examiner, namely Column 10, lines 11 - 18, that "A basic force sensation is force detents that are output at particular rotational positions of the

knob to inform the user how much the knob has rotated and/or to designate a particular position of the knob. The force detents can be simple jolts or bump forces to indicate the detents position, or the detents can include forces that attract the knob to the particular rotational detent position and resist movement of the knob away from that position" (column 10, lines 11 - 18). Thus, the different force sensations that Levin et al. disclose are defined by jolts, bumps and attraction or repulsion forces rather than by a weakened or emphasized feel (force) of resistance, depending on the width of the movable range of the manipulator. That is, Levin et al. do not disclose a feel of resistance that is inversely proportional to the remaining width of travel (proximity) from the current position of the manipulator. Hence, in Levin, the jolts, and bumps reflect a position of the manual manipulator or a force-related data such as velocity or acceleration, but do not disclose or teach that the feel of resistance control is performed according to the width of the movable range of the manual manipulator. As such, claim 1 is not anticipated by Levin et al.

Regarding the rejection of Claim 5, the pending claim 5 recites that "the control section computes the width of the movable range of the vehicle-mounted electric device from its current position to an end of its possible motion according to changes in position signals supplied from the position sensors, and controls the output to the actuators according to the computed width of the movable range." Thus, the configuration of claim 5 enables the manual manipulator to provide its operator a feel of resistance varying with the width of the movable range of the vehicle-mounted electric device, wherein the feel can be weakened when the movable range of the vehicle-mounted electric device from its current position to an end of its possible motion is wide or, conversely, it can be emphasized when the movable range is narrow (page 12, lines 5 - 11). Whereas, although Levin et al. disclose manual manipulator used to control electronic (electric) devices, Applicant submits that that the controlling of the output of the actuators is performed, as discussed above, via different force sensations such as jolts, bumps and detents rather than via a weakened or emphasized feel (force) of resistance, depending on the width of the movable

range of the of the vehicle-mounted electric device. As such, claim 5 is not anticipated by Levin et al.

Therefore, Applicant submits that claims 1 and 5 are allowable, as well as their correspondingly dependent claims 6, and 10 - 12. Thus, Applicant earnestly requests that the rejections of claims 1, 5, 6, and 10 - 12 under 35 U.S.C. §102(e) be withdrawn.

Conclusion

Applicant submits that this application is now in condition for allowance, and favorable reconsideration of this application in view of the above amendments and remarks is respectfully requested. If, there are additional fees due, Applicant requests that this paper constitutes any necessary petition and authorizes the Commissioner to charge any underpayment, or credit any overpayment, to Deposit Account No. 23-1925.

If the examiner finds that there are any outstanding issues which may be resolved by a telephone interview, the Examiner is invited to contact the undersigned at the below listed number

Respectfully submitted,

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